

North Portal, Chartres Cathedral.

THE LEARNING OF ARCHITECTURE.—VI. ROYAL ACADEMY LECTURES, 1902.

By Professor Aitchison, R.A., Past President, Royal Gold Medallist.

HE lectures I have given you are, on the supposition that some of you are structural poets, and that you will evolve what may be called a new style; and I have only said what characteristics the new style should, in my opinion, take. But to define the form that a new style will take is impossible; one must be a prophet to do that. For example, the poems of Lord Byron not only took England by storm, but the whole civilised world. How could anyone prognosticate what form the works of the next great poet would take? It seems to me that no one could foresee that the poems of Tennyson would not only succeed in captivating the new generation, but would eventually eclipse and discredit Lord Byron's poems, as you may see by Thackeray's remarks. I hope this will make what I mean clear. If there be such a structural poet among you, I beg to hold out to him the glory of such an evolution, not only for himself and for his country, but for the world. He might do for our stagnant art what the Romanesque architects did when they started on the way to Gothic; and Gothic altered continually as it proceeded, till it died out; and the same thing happened to Arabic and Moresque architecture, only Arabic architecture has not, I think, yet died out. Architecture is not like literature, that only requires an outlay for pens, ink, and paper. An architectural monument is a costly creation, which may cost thousands or hundreds of thousands of pounds; and before the greatest genius that ever lived could get any person, and still less any State, to entrust him with the designing and looking after some great public building, he must not only have shown his artistic capacity, which might be done by drawings and models, but also given proof that he could see the work properly carried out; so if he is not a man of fortune he must as soon as possible perfect himself in those arts which are necessary to show his capacity and invention, to get his bread. The Italian architects were not only born with great capacities, but they began to study the art very early, and generally showed their powers when they were little more than children. Niccola Pisano was taken from Pisa by Frederic II. when he was scarcely fifteen and used by him as his architect at Naples, and Michelangelo was but fourteen when he corrected his master's drawing, he being a pupil of Domenico Ghirlandajo.

Filippo Brunelleschi (1877-1444) was a goldsmith, jeweller, and clockmaker, and eventually became a sculptor. Many of you may have seen his casts for the sculpture of the gallery of Florence Cathedral. He sold a small farm, and with the proceeds went with his friend Donatello to see Rome, and to study its buildings; after having spent all his money he supported himself by exercising his old trade of jeweller; and on his return to Florence he got some architectural work to do for great men there. He declared at the meeting of all the celebrated architects of Europe that he could dome the cathedral at Florence without centering, and eventually got the cathedral to do, and domed it without centering; curiously enough, there is nothing left but a sketch of his method. He built the Pazzi Chapel, Santo Spirito, and the Pitti Palace at Florence, and may be looked upon as the re-introducer of Roman architecture.

The next great architect was Leon Battista Alberti (1404-about 1448), who was the Admirable Crichton of his age, for there was apparently nothing then known that he had not mastered. He was employed, it is believed, to make a design for the rebuilding of St. Peter's, in conjunction with Rossellino, for Pope Nicholas V. He is supposed to have designed and carried out the front of Santa Maria Novella and the front of the Rucellai Palace at Florence, to have built the church of S. Andrea at Mantua, and converted the old church of San Francesco at Rimini into a mausoleum for Isotta and the Humanists; and besides his written works in Italian, which helped to form the language, when he became a canon of the cathedral of Stana Maria del Fiore, he wrote treatises in Latin (subsequently translated into Italian) on architecture, painting, and sculpture.

Bramante (1444–1514) was born the same year that Brunelleschi died. He was originally a painter, but must have early shown architectural capacities, for he was greatly employed in Lombardy and by Julius II., as he was working at some of the fortifications in the diocese of Giuliano della Rovere before Julius II. became Pope, and made for him his first design for St. Peter's. He was consulted about the lantern of the cathedral of Milan, did some work at the cathedral of Como, and designed the Cancellaria at Rome, as well as the little church of San Pietro in Montorio, which was considered by his contemporaries to be perfect.

But it will be more to the purpose to speak of some of the earlier architects of genius—Ictinus and Callicrates, the architects of the Parthenon; Ictinus, the architect of the Temple of Apollo at Bassæ; Mnesicles, the architect of the Propylea, and the nameless architects of the Erechtheum and the Choragic monument of Lysikrates; the nameless architects of the Pantheon of Rome and of the Arch of Titus; of Anthemius of Trales, who, with Isidorus of Miletus, designed and carried out the great church of Santa Sofia at Constantinople, and of Isidorus, the nephew of the original Isidorus, who re-domed Santa Sofia after the original dome had been shaken down by an earthquake, and made the versed sine of the dome much greater; and some of the great Gothic architects, who have left monuments the world is proud of, but whose names are forgotten:—all the buildings mentioned have merit, but the Greek ones are models of perfection, not to be copied, but to be compared as a standard with our own buildings. The Italian Renaissance architects mainly revived Roman architecture, but added a grace to it that the Romans hardly attained; and this grace is especially to be seen in Bramante's, Michelangelo's, and Raffael's work.



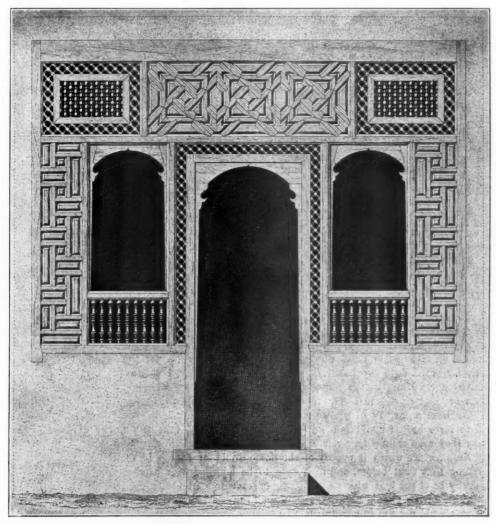
AMIENS CATHEDRAL.

You must remember that architecture is a very ancient fine art, and is a progressive one; but it can only progress when it is undertaken by men of genius who have possessed themselves of all the useful knowledge of their predecessors. You see what strides the engineers have made in construction mainly by the use of the new materials iron and steel. and a thorough knowledge of statics. The engineers are useful, deserving, and praiseworthy men, who supply the commonplace wants of mankind; but the architects seek for forms appropriate to the destination of their buildings, be these sublime, magnificent, dignified. stately, or beautiful: and they have to make the construction sound and stable as well. The people are ordinarily blest with those capacities that are wanted for the existence and wellbeing of mankind at each particular epoch; but at certain epochs and in certain countries there is a passionate desire to have their buildings made sublime, stately, or beautiful: and this desire for excellence often runs through the whole of the fine arts, poetry, oratory, music, dancing, sculpture, and painting. These are called art epochs. One of these art epochs, and the greatest, came into being at Athens, after the battle of Salamis, mainly in the time of Pericles, and another in the time of Alexander the Great, when Dinocrates rebuilt the Temple of Diana at Ephesus: Isocrates, the orator, lived through the interval. The next great epoch was first from the latter end of the Roman Republic to the death of Tiberius, called the golden age of Roman fine art; and from that date to the death of Caracalla, comprising the silver age. Then there was the great Byzantine epoch, in the days of Justinian. Then the great Romanesque period until the rise of Gothic, Gothic was the most brilliantly original and progressive of any epoch, though a little barbarous. Then came the Renaissance. The superiority of Greek architecture and sculpture over that which just preceded it was astonishing; and so after the discovery of the flying buttress was the rapid development of Gothic and the spread of revived Roman architecture; everyone at the time desired one of these, and men were then born with unusual faculties ready to devote themselves to the arts. The Greeks had conquered the Persians; Europe had thrust back the Saracen conquerors and carried war into the Saracens' country. Let us hope there will be a new passion for noble and beautiful architecture, and that you will be able to supply this want when it comes. At present the only disinterested passion that seems to exist is for the discovery of the laws of nature, and the only other wide-spread passion seems to be for gold.

When I was a student here I sat at the feet of the great Professor Cockerell. He always finished up his course of lectures by giving some advice to the students, and I know at one of the last lectures I attended he told us to be careful to make ourselves capable all round, for whatever merits the style we had chosen might have, we could never be sure that some new or discarded style might not come into fashion, when all our skill and ability in the old style would be thrown away, and we should have to learn the fashionable style—of course, he was then speaking of Gothic. As an example of the truth of this prophecy, I may instance Decimus Burton, who was at one time one of the popular architects. He designed the Athenæum Club and the screen to the Park at Hyde Park Corner; but after the partial resuscitation of Gothic his very name was forgotten by the students of the day. There was a mention of this in his obituary in the Times.

What I hope for is a time when styles are only spoken of in antiquarian discourses, that we may have an architecture of our own which solves every problem that comes before us in a better way than has hitherto been done as far as utility goes, and with a character that suits the destination of each building and meets with the admiration of those with cultivated taste—an architecture adorned with beautiful mouldings suited to the climate, and the most perfect sculpture of mankind, animals, foliage, and flowers.

Though I would stimulate the ambition of those students who are structural poets in the bud, I would also mention to those who merely take up architecture as a trade that, as a rule, it is not a lucrative one, and that they will rarely get more than a quarter of the money for



SHOP FRONT AT TANTAH, EGYPT. From Bourgoin's Les Arts Ar.thes.

their work that they might get by some occupation they are fit for, and that it might be better for them to forsake architecture. I say this both in the interest of architecture and of yourselves. We all want to succeed in life; but what is success? In my opinion it is being occupied in what you love and in having done something to delight and ennoble your fellow-creatures; not to have money, a big house, and to live on stewed meats and choice claret;

but if you start without the gift of architectural invention I do not think you can acquire it; and, instead of a success, life will be a miserable failure.

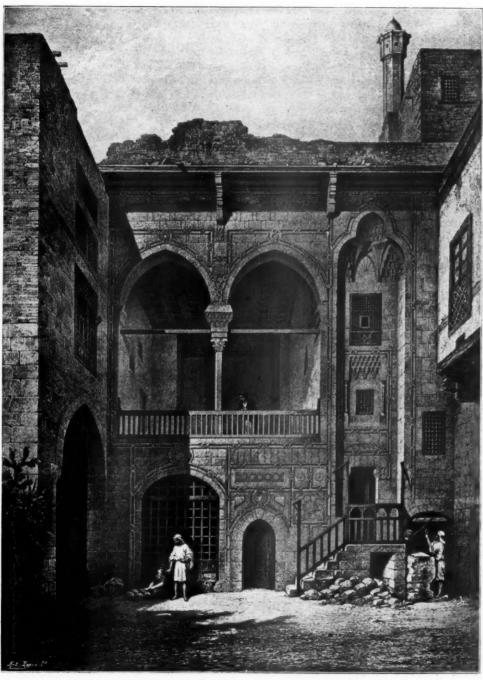
Yet there are some who think themselves bound to follow it, but I cannot believe this to be true. No one can be bound to follow an occupation for which he feels himself unfit, and it should be clear to everyone that unless he has a passion for this transcendental occupation he is unfit for it. Architects have very much to answer for in the view generally taken, that architecture is only like shoeing a horse or mending a kettle, that anyone can learn it if he is diligent, than which nothing can be more untrue. There was no mistaking Fra Giocondo's calling when he would sketch the antique, though he was whipped at his convent for doing so.

There is a craze among certain people for having all the best known styles of past times for their reception rooms—for example, a Louis Quatorze drawing-room, a Louis Quinze boudoir, an Elizabethan dining-room, a hall like the portico of a Greek temple, a Pompeian smoking-room, and a Saracenic billiard-room. This shows the absence of any architecture that charms the people as the Gothic cathedrals did at the time of their building.

There is a good deal of work to be done in patching up ecclesiastical buildings, although it involves forgery, which is generally called "assimilating the influence of a past style," while the style of all architecture should be the best that the time affords. I have seen cases where the face of the sculptured stones has been so destroyed by weather that no trace remained of the sculpture, not even the outline, and its place was being filled by ordinary carvers with scriptural notions of their own. I have seen, too, Romanesque churches with sculpture that had been ruined, replaced by the inventions of men who seemed to be the comic-pipe and umbrella-handle artists of the town. To the ordinary rustics who go to the church one is as good as the other; but all value as a piece of antiquity is lost, and no philosophical deduction as to the civilisation of the time is possible. In some cases, such as a long succession of areades with canopies, of which one or two at each end are left comparatively perfect, it might possibly be allowable to repeat them, though the Gothic architects rarely made two alike; but where there is hardly a trace left of the original, restoration is pure forgery, and I think the ecclesiastical authorities are in fairness bound to have cut on those parts, or have stated on brass plates, "These parts are modern imitations." Much forgery I dare say has been done by literary men, for Alberti's play of Philodoxios deceived Aldus Manutius the younger, who was said to be a good Latinist, and who published it as an original classic in 1588. The Art of Cookery by Apicius Cœlius, in Latin, is supposed to have been a forgery of some writer after his death, and passages in Petronius Arbiter are said to have been forged; but no competent critic would take any notice of these except to say they were clumsy forgeries.

Architecture which is worthy of the name would of course be somewhat different from anything that went before, and if it were to be adorned with carving or sculpture it would naturally be of the best which could then be executed, especially if it were in a church or cathedral, for we should hardly expect to get rewarded for presenting to the Deity rubbish that we should not put in our own houses.

In the early part of these lectures I said we might possibly some day learn something of the logic of shapes and ornaments; but this is a hope, not a prophecy. It struck me that probably there was some logical reason for the different sorts of leaves and blossoms of trees and plants, although the leaves act the part of mouths and pores. In sub-tropical countries you see leaves of most extraordinary shapes; some are enormously large and have holes in them, and to my mind this has some logical connection with the wants of the plant; and I once thought it probable that the curious shapes of leaves had an attraction or repulsion for electricity,



BEYT-EL-EMYR. SEVENTEENTH CENTURY. From Friese d'Avennes' L'Art Arabe.

which enabled them to assimilate from the soil food or poison. I was once in hope that some learned botanist at a university might get the professors of chemistry and of electricity to try whether this was a fact; but the Professor I spoke to treated the whole subject with ridicule, and as to the shapes of leaves he said that they were serrated when there was not enough stuff to make them smooth-edged. It seemed to me possible that the leaves and flowers formed some consistent æsthetic problem that might lead us to try a similar method; we think esthetic problems must have been solved for the benefit of some creature who takes an interest in them, but that creature may be man. We do not know whether any animals but the bee and the butterfly are affected by the colours of flowers. It has been stated that in some of the wildernesses of America, which are covered with azaleas, any new tint or colour more violently attracts the bees than the old ones, and by their being fertilised by the pollen that sticks to the bodies of the bees, some shades of colour, and even the colours themselves, are entirely changed. This admiration of the bees for a new tint or a new colour seems to show that they have some asthetic liking; but whether grazing animals have any admiration for the flowers about them we do not know, though we may take it for granted that red is obnoxious to bulls from the animosity they show at the sight of it. It is therefore unlikely, if the shapes or the colours of flowers do not affect them, that any trouble would be taken about the esthetic appearance of plants for their sake. It appears from some of the ornament that has been used by man on his buildings that it was mostly taken from some flower foreshadowing plenty, or from fruit which was used for food—the lotus for example.

Anyone who takes the trouble of observing carefully the colouring of flowers cannot help coming to the conclusion that some of the artifices employed are meant to please some creature rather than to add to the distinctness of the flower; though the part where the honey is secreted is generally made palpable to the insect by a contrasting colour, and this of course saves unnecessary labour to the insect. Perhaps this dissertation has but little interest for the students; but as floral ornament has played a considerable part in the ornamentation of buildings, that seems to be a good reason for paying more attention to the subject than is generally done. As we see from ourselves, the power of evolution in Nature is the most wonderful thing that has ever been brought to our notice, through the untiring efforts of the philosopher Darwin. The philosophers can hardly say whether the first fossil that is supposed to have had life was a vegetable or an animal, but it is this from which the animals sprang, and we from some of them; at any rate it shows that we must have had a long descent. It seems to be considered that it was some kind of sea-slug from which the predecessors of man gradually came: those gill marks that are occasionally found in people's necks seem to show the signs of our descent; and it is a great step from any kind of sea-slug to the highest specimen of man. The animal that appears to have been the ancestor of the horse originally had five toes to each foot; these seem to have completely disappeared in the solid hoof of the present horse. If, according to the latest theory, there is such a power of development in Nature, it is impossible to foresee what development might take place in a thing so wholly produced by man as architecture. As far as antiquarian researches go, all styles that are now found on the globe have not proceeded from one original source; but certainly Gothic, which is the most markedly different, proceeded from Romanesque after the architects had been brought into contact with the Saracens and learnt from them ornamental geometry.

There can be no doubt in my mind that whenever philosophers desire to describe any people of whom nothing has been left but some architecture, they will consider that the architecture of the country, even where it does not contain any writing, gives a fair notion of the degree of civilisation that the people had attained. We have just read about the

discovery at Stonehenge, that these stones were worked with flint instruments and a stone mallet, and are supposed to be more than 1,600 years before our era. M. Choisy, in his History of Architecture, gives a long account of how monoliths were moved to the place wanted and made to stand upright. Fortunately we have the picture-writing of the Mexicans brought over by Cortez or by some of his companions; he came into the midst of a civilisation in which the bulk of the population were in the Neolithic age, while the governing classes of the nation were of the Bronze age, Cortez and his fellow-warriors being late in the Iron age and using firearms. If Cortez or some of his men had forged some of the Mexican picture-writing, it would hardly have taken in his enemies, and would be almost useless now to show what Mexican picture-writing was like unless it were excellently copied.

However good a living you are able to get by paraphrasing deceased architecture, it will not do much to forward the art, nor can a paraphraser be considered as an original architect; the capacity for developing the old art, which we should now call invention, is not, as far as I know, to be taught.

All that one can do to aid original architecture is to recommend those who feel this stirring of invention within them to try by repeated strivings to develop the forms that we already have into something that is better and more directly appeals to us. Every age has got some desire mostly for the thing that seems necessary to it; for instance, at the present time we want machinery to turn those powers of Nature that we have discovered more completely to our own use, and this is being done; but I see but little desire for anything grand or beautiful, and these are of the things that architecture wants. It may be only necessary for an age with the highest aspirations after beauty to have one poet, the man who can give articulate voice in the direction that every man desires; though the best poets, painters, sculptors, and architects have generally appeared amongst a multitude of competitors. I hardly know enough to say whether the desire of one man for anything, however brilliant he is and however hard he works, will produce what is wanted, but it is essential, whether he be the mouthpiece of a nation or only of a very few, to study, to endeavour, and to strive. It is too ridiculous to suppose that any art will start again fully equipped, like Minerva from Jupiter's brain, or that all the lessons we can learn from the past are to be cast aside; they are to be profoundly studied and the deductions made from them to be used, as I have told you how the poets have searched all past and present poetry to try and find out the reason of their success, and the mode by which it is to be expressed. All that the man of the greatest genius in our art can hope for is to strike the particular chord that will vibrate in the hearts of the present generation after he has learnt all the lore of the great master-builders of the past.

THE FIRST INTERNATIONAL EXHIBITION OF MODERN DECORATIVE ART. TURIN, 1902.

By Cav. WILLIAM SCOTT [A.].

"L' Evoluzione dell' Arte nel Passato c' insegna ad essere moderni."

THE idea of an Exhibition of Modern Decorative Art emanated from the architectural section of the Artists' Club in Turin early last year. It affords us several surprises, and certainly some disappointments; but its influence on decorative art, in Italy at least, is likely to be considerable-indeed is already being manifested -in spite of persistent prejudices, which pro-

verbially die hard.

The keynote of modernity was struck by the directing Committee in its programme of invitation to exhibitors, and was very properly insisted on throughout, in spite of the protests of those who preferred to continue copying old forms, rather than take the trouble to design new ones upon sound and logical principles. This programme laid down with admirable and quite exceptional clearness the lines it was considered advisable to follow, in order "to avoid a useless duplication of the customary manufacturers' exhibitions"; whilst welcoming all those "artistic manifestations" regarding "the asthetics of the street, the house, the room, which constitute the three great problems towards which," said the Committee, "we wish to draw the attention of the public." The merits of foreign work were frankly recognised, while the servility with which it is usually copied were deplored. An appeal was made to Italian manufacturers not merely to copy the forms of foreign work, but to penetrate its spirit, making use of logic and simplicity in design. We were reminded that "Beauty should arise in great part from the intelligent application of material to its uses," and were told that "it is time to show by example that beauty should not result from richness of material and profusion of ornament, but from elegance of form, harmony of colour, and perfection of practical execution." Those who have been constantly familiar with even the best of Italian decorative art work during, say, the last twenty years, will recognise that a great step in advance has been taken when, by a responsible representative body, such sentiments are boldly advanced as a guide.

The buildings to be used for the Exhibition were made the subject of a competition, the first and second prizes being awarded respectively to the architects Raimondo D'Aronco and Annibale Rigotti. These gentlemen were requested to cooperate in the production of the definite design, and the result is more than merely satisfactory;

it is really successful.

The Cav. D'Aronco has for some years resided

in Constantinople, occupying the post of Chief Architect to the Sultan; and if the exuberance of his fully Oriental and fantastic imagination has been toned down by the influence of his partnerwhose original design was marked by an almost excessive simplicity—the partnership has been beneficial to the interests of the building. It goes without saying that a liberty, not to say a licence, of experiment was allowable in a purely temporary construction of wood, canvas, and plaster, which might be undesirable, if not impossible, in a permanent structure of stone, brick, or iron; and individual features will find, as usual, individual critics who object to them; but it is something gained to the progress of architectural development to have produced a building so well adapted to the purpose it had to serve, and so comparatively free from the shackles of tradition.

Turning to the various departments of the Exhibition itself, it is only fair to take those of Italy first in order. The general effect is good without being startling; and if there be discoverable in the furniture and decorative objects generally a leaning upon models we have seen elsewhere, we must remember how frankly and loyally foreign influence is acknowledged by the best authorities in the country. It can, in consequence, hardly be said that Italy shows yet a marked individuality of her own in the designs; and in a very large, a far too large, proportion of the exhibits-except some of the very best-the execution leaves not a little to be desired.

The French Section exhibits plenty of the special characteristics of French design. There is a strong tendency to the bizarre, and, as it seems to us, a reckless use of curves and excrescences which have no relation to the construction, and no explanation in utility. Of course, as usual, the finish and the execution generally are superb-in the metal-work as in the other branches; and there is a welcome freedom in the treatment of the mouldings, which, however, in many cases adds enormously to the cost, and to demands upon the skill of the workman. There is some very suggestive work in leaded glass, showing how this can be adapted to modern requirements, and yet retain its artistic character under a free

The ensemble of the American Section is pleasing, and some departments, such as the wellknown Tiffany glass and metal-work, need no comment; but the show as a whole can hardly be called a fairly representative one, doing justice to the progress which decorative art has of late years made in America. It wears, perhaps, a little too much the air of an ordinary miscellaneous exhibition, varying from personal jewellery to kitchen ranges and baths; but there are charming examples of good and simple bedroom furniture among the exhibits.

The German Section is one of the largest, most thorough, and most important. It leaves an impression of richness not always refined, colour not usually pleasing, and a certain barbaric crudity of design in the larger features, which may be taken to indicate a striving after

novelty, but is hardly happy.

Several of the complete rooms are much more satisfactory, especially the bedrooms—some with unstained wood and no mouldings. There is here also some good jewellery, quite modern in design, and reminding one of the best English work. Those responsible for the German Section have grasped better than some others the promoters' idea, and have more thoroughly carried it out. There is less of the bazaar: more of real house construction and furnishing; in short, a greater attempt at decorative work in the broader sense, whatever we may think of its character and results.

In the Austrian Section we experience a genuine surprise. We are struck by the unusual excellence of the design—simple, constructional, well-proportioned, suited to its purpose, and full of the best art-feeling. The execution is practically perfect—leaves nothing to be desired. At the same time the colour schemes, mostly simple, are harmonious and pleasing. Altogether this section is undoubtedly one of the best, and it is with a quite legitimate pride we may note a kinship in the designs with much that for some years past we have been accustomed to see nearer home. In this case at least our influence has been for good.

The Hungarian exhibits also furnish a pleasant surprise. They show a marked originality, good design, excellent workmanship, and a certain fulness and power of colour without gaudiness. While much of the best work is simple in character, there are examples showing rather daring experiments, as unusual as some of the French work, but much more constructional. The jewellery is peculiarly attractive. Perhaps the only really unsatisfactory work shown here is the mosaic; but metal-work, especially copper, is good, and the wall decoration is both carefully designed and well executed. There is a collection of curious pottery with rich colouring, glazes, and lustres.

Holland has sent some simple and very elegant furniture, severe in its lines, and of excellent workmanship. The general effect of this large and varied section is good, though the walls are not satisfactory. There are many examples of simple stuffs in dull but harmonious colouring, and a number of interesting pieces of hand-stained

or stencilled linen, showing how an extremely decorative effect can be obtained by means which are within the reach of all. The show of pottery is—as may be imagined—well worth study, the forms being both good and original.

Switzerland is more or less represented, and the Japanese Section attracts a good many visitors; but for us their interest is not absorbing.

Sweden has some charming productions, and furnishes another of our surprises. The best examples are usually the simplest, but an inlaid cabinet of exquisite workmanship is one of the most perfect objects in the whole Exhibition.

It is when we come to the English Section that we are met with a painful disappointment. At least we had a right to expect that it would be fairly representative of what can be, and is being, done in England. It is nothing of the kind, nor did repeated visits succeed in removing the unpleasant conviction that "someone had blundered." Certainly the Italians were generous enough in their allowance of space, and of opportunities for the creation of a really representative show; and it is no secret that the opening of the English Section was looked forward to with great expectations by many of those whose interest in the advancement of decorative art in Italy are most marked, and who are most desirous of profiting by the lessons to be learned. No attempt has been made to show the relation of decorative art to the actual surroundings of our daily life. A clever cabinet here; a charming jewel there; a drawing of one building, a photograph of another; a design for a carpet or a wall-paper, a book-plate or a piece of embroidery-and these scattered about a large, comfortless space-cannot, however excellent in themselves, be fairly said to represent English decorative art of the present day. We may be grateful for the opportunity afforded to us of examining a large collection of drawings, paintings, and designs by Mr. Walter Crane, which show afresh his great versatility and enormous industry; and this work of his occupies two large rooms, each fifteen metres square, out of the three allotted to the English Section; but surely there must have been a sad misapprehension of the scope of the Exhibition, and of the best way of realising it, when mere drawings and designs-projects, in fact-are made to do duty for the objects they are intended to suggest. In no other section has a similar failure occurred; and it is not a little humiliating to see a golden opportunity lost, for reasons not readily explicable. Possibly those responsible for the formation and disposition of the section were determined to hinder the expression of that "commercialism" of which we are often-and but too justly-accused; yet it was not necessary to go to the other extreme, and limit the show to the work of a small set of individuals, and that in mere isolated specimens, without attempting to show what these artists can do with an apartment, or even a single

room, as a complete whole. Crude whitewashed walls, staring and offensive red curtains; a few clever drawings hung here, a charming bit of solitary furniture there, but utterly lost in this wilderness of unsympathetic surroundings; some bookbindings, illustrations, or table glass, in a common show-case in the midst of a rough uncarpeted floor; and we have a fair description of the English Section: not flattering to our national pride, not advantageous to our reputation, but literally and absolutely true.

Again, it may not be easy to explain why on other than merely personal grounds there should have been made the unnecessary and invidious distinction between an English and a Scotch section. This latter is certainly better thought out than the former. There is at least some attempt at arranging the various objects in a sort of relation to one another, though it does but confirm the conviction that many of them must be "gey ill to live wi'." We may comfort ourselves with the thought that in execution we can at least hold our own; but, in the face of certain "manifestations" miscalled artistic, it is not yet unnecessary to insist once more on the well-worn truism that eccentricity is not synonymous with genius, and that in order to produce a beautiful work it is not essential to have taken leave of one's senses.

Bordighera.

THE BRITISH SCHOOL AT ROME.

By R. Phenè Spiers [F.], F.S.A.

THE British School at Rome, projected in 1899, was opened in the spring of 1901, excellent rooms having been secured for the school in the Palazzo Odescalchi. The first volume of its Papers,* just published, contains two of great interest and value from the archæological point of view, and may be looked upon as a happy augury of future developments. We gather from the prospectus that the School has been modelled on the existing British School at Athens, and is intended as a training ground for students fresh from the universities and other educational institutions—as a centre round which more mature students may group themselves for purposes of systematic research, and as a source of information and advice for visitors desiring to pursue serious studies in Rome.

It is the last clause which suggests the great value which architectural students may now† derive on their visit to the Eternal City, especially if in course of time the new School is able to acquire a good reference library of works specially connected with Rome, so that they may be consulted by them on the spot. We are informed in the prospectus that the excavation of ancient sites, which has formed an important part of the work of the School at Athens, is excluded in Italy by the rules of the Italian Government; but this privilege is extended to the French students of the Villa Medici, and there does not seem to be any reason why the students of the British School should not

be placed on the same footing. However, apart from this, there are plenty of buildings aboveground, both Roman and Renaissance, which the English student might measure and delineate, and the Director of the British School would render a valuable service to English travelling students if he were able to obtain for them permission to measure and delineate some of the Roman palaces. It would add also to the value of the Papers of the British School if some of their drawings were published in them. The special training through which the architectural students who visit Rome have already passed might enable them to render some service even to the mature students mentioned in the prospectus, whilst the classical knowledge of the latter would naturally assist the students in the deciphering of inscriptions.

The first volume of the Papers of the British School at Rome contains two papers, the first by the Director of the new School, Mr. G. McNeil Rushforth, on S. Maria Antiqua, the ancient church which was revealed some two years ago by the removal of the church of S. Marie Liberatrice and the clearing of the ground behind it. The dedication of the church was settled by the discovery of an inscription in December 1900. The church is first mentioned about the middle of the seventh century, and in the Liber Pontificalis it is stated that it was decorated with paintings in the early years of the eighth century by Pope John VII. (705-708). Mr. Rushforth's paper contains the first complete account of the church yet published, and is illustrated with a plan. As the photographs of the paintings are the property of the Italian authorities, and cannot be reproduced until the official account has been published, Mr. Rushforth is able only to give a written description of them. to which we refer the student as a model of painstaking research and inquiry. According to Mr.

^{*} Papers of the British School at Rome, vol. i. Printed for the subscribers and sold on their behalf by Macmillan & Co. London, 1902.

[†] Already in the sixties there existed in Rome an institution known as the English Academy, but the work to be done there consisted only of studies made from the nude figure. As I have never heard of it since my visit in 1864, it has probably ceased to exist.—R. P. S.

Rushforth, the decoration was the work of Byzantine artists, but, carried out in Rome, has acquired something of a local character in consequence, and is, perhaps, the only complete

example existing.

The second paper is on the Classical Topography of the Roman Campagna, by Mr. Thomas Ashby, jun., and is illustrated by a series of plans of some of the great roads leading from Rome, the plans being drawn to a scale sufficiently large to show on them the remains of towns, works, reservoirs, &c., a description of which is given in the text. Although in a sense the paper is published as being the past year's work, it is evident that many years must have been devoted by Mr. Ashby to the

researches. The account given has more of an archeological than architectural interest; but in the description of the construction of walls and of architectural features, such as cornices and capitals, an architectural student on the spot might be able to make conjectural restorations of some of the monuments, and, as has already for many years been shown in the drawings sent over by the French students of the Villa Medici, such studies are of considerable value. As we have already observed, this first volume of Papers is of happy augury for the future, and if some of our travelling students are allowed to take part in some of the work done by the new School, it will open out a new field for the Tite and other students.



9, CONDUIT STREET, LONDON, W., 27th Sept. 1962.

CHRONICLE.

The Standing Committees.

The following appointments to the Standing Committees of the Institute have been made by the Council under By-law 46:

ART COMMITTEE.—Sir L. Alma Tadema, R.A. H.F.]; Mr. T. Raffles Davison [H.A.]; Mr. George Frampton, R.A. [H.A.]; Mr. W. Flockhart [F.]; Mr. Walter Millard [A.]

LITERATURE COMMITTEE. Mr. Francis Bond, M.A. [H.A.]; Mr. J. D. Crace [H.A.]; Dr. Alex. S. Murray, F.S.A. [H.A.]; Colonel Lenox Prendergast [H.A.]; Mr. J. Humphreys Jones, B.A. [A.].

PRACTICE COMMITTEE.—Mr. C. Fitzroy Doll [F.]; Mr. Edward Greenop [A.]; Mr. Sydney Perks [A.]; Mr. A. H. Kersey [F.]; Mr. Butler Wilson [F.].

SCIENCE COMMITTEE.—Sir Alexander Binnie, M.Inst.C.E. [H.A.]; Mr. F. N. Jackson [H.A.]; Mr. J. Fletcher Moulton, K.C., M.P., F.R.S. [H.A.]; Mr. Lewis Solomon [F.]; Mr. A. T. Walmisley, M.Inst.C.E. [H.A.].

The New Liverpool Cathedral.

The executive committee of the Liverpool Cathedral Committee have issued the report of Mr. G. F. Bodley, R.A., and Mr. R. Norman Shaw,

R.A., advisory architects, on the designs submitted in the preliminary competition for the proposed Cathedral for the diocese of Liverpool. report, which the Committee have adopted, is as follows :-

Gentlemen, Of the great importance of ensuring a fine design for the proposed Cathedral there can be no ques-Truro alone in England has had a new Cathedral, the first built for many generations. Truro is but a county town, while Liverpool is one of the largest and most important of our cities.

The new Cathedral must be a stately, a dignified, and a beautiful building. It must be suitable for the services of the English Church, and be capable of holding large

All this is obvious. congregations.

The Committee having determined on a competition, it is our duty to select the best designs submitted in this preliminary competition, and then to invite their authors to compete for the great work, in accordance with the regulations that may be laid down for their guidance.

What seems to be necessary is a design having a distinctive character of its own, and one not without originality; a design with a striking unity of effect and idea.

We were prepared to find more designs of a Renaissance or a Classical manner. We were surprised to find so few in those styles, and those, we feel bound to say, not commanding or remarkable. The main body of the best designs sent in are Gothic. This seemed to point to Gothic as the style from which we should find it practical to And, indeed, that manner is accepted by most as generally the suitable one, except under special circumstances, for church building. In making a selection there seemed no doubt but that our own English phase of the style should be adhered to.

Many of the designs sent in have plans more or less like numerous fine mediaval Cathedrals, with many chapels clustering round the eastern end of the choir. It is no doubt an arrangement of much beauty. One or two such chapels may be desirable, as being very useful in bringing comparatively small congregations together for early or evening services, but many such chapels would not seem to be appropriate for the use of the English Church. There should certainly be one or two such chapels, but we suppose not more would be needed. Modifications of many of the plans submitted would, therefore, seem to be necessary. How far what we have said on this point should be embodied in the instructions to be given for the final competition we leave to the consideration of the

We feel that the object of the competition is to enable the Committee to find out the best man for the work. What he submits may be thoroughly examined and discussed, and, if it seems desirable, may be modified or improved on.

The opportunity, the great opportunity, must not be lost for the erection of a really stately and a beautiful building, one of striking proportions, and of delightful detail. Our old ecclesiastical buildings afford many such examples. Not, indeed, that they should be copied, for Liverpool Cathedral must be an original work of art and have a character of its own-one fitted for the requirements of the present age, and one specially designed for its site. The spirit of our best architecture may, however, well be caught, and its magnificent traditions may be recovered

Whatever style is adopted, there should be that nobility of expression, and that refinement of feeling, that is so characteristic of all the best architecture of the great times. We may add that a noble simplicity, enhanced by touches of beauty, is not a thing to be afraid of.

In judging the designs one must take care to discern the real effect that the building would have, and not be led away by any clever delineation of a conception that may not be really good. This is evident, but a first impression given by a clever and beautiful drawing, even though it be of a poor design, may be misleading and deceptive.

We shall look forward with interest and pleasure to the work of reporting to the Committee on the designs to be sent in for the selection of one that may be not unworthy

of your important and great city of Liverpool.

There has happily been some revival of taste and knowledge of architecture in recent years, and this new Cathedral should show a dawning sign of that improving state of feeling, and mark the period as one of greater advance towards the beauty and the dignity that characterised the great days of art; and, above all, it should be an example of cultured and religious feeling in church building.

With regard to the plans submitted, we beg to report that we have examined the various portfolios of designs, and all the drawings that were hung on the walls, with great care and with the deepest interest. The number in all is 103; of these, thirty-three are designs prepared expressly for this competition. They represent much labour, and we may also say a considerable amount of talent. Twenty-three are sent as evidence of skill and ability to design a Cathedral, and consist mainly of designs which have been submitted mostly in competition for large churches in different parts of the world

The remainder are a miscellaneous collection of photographs, drawings, and sketches partly ecclesiastical and partly secular. Though many of them are of much excellence, they do not show any evidence that their authors have any special claim to be considered aspirants for the work of building a cathedral. It is vain to shut one's eyes to the fact that many of the competitors in the last class have taken absolutely no trouble. They have simply sent in a portfolio containing few, or many, photographs or drawings which they happened to have by them, whereas in the cases to which we first referred, where special designs have been prepared, the competitors have, many of them, taken great care and trouble, and have done their best to respond to the invitation of the Committee.

From the plans sent in we have selected five that we consider show their designers to be capable men. give evidence of considerable knowledge of old work great care in design, and originality of a sound and practical nature—not the originality which has little aim beyond being eccentric for the sake of being considered original, but which does not regard beauty and fitness as necessary.

These five we suggest should be asked to prepare complete designs for the Cathedral, in accordance with the conditions to be laid down by the Committee.

This seems a small number to name out of such a long

list of competitors, but, on the other hand, it may lead to greater efforts being made to conceive and delineate a fine design, and with greater hope on the part of the designer of success, and, for the world, for an ultimate and satisfactory result. These designs are numbered Nos. 20, 45_A, 68, 71, 95.

In addition to the above we consider it would be a gracious act, and one that would be appreciated, to nominate a certain number for honourable mention, as a distinct recognition of considerable skill shown sometimes in planning and sometimes in design, though we were unable to award them a still more honourable place. We selected eight-namely, Nos. 17, 37, 41, 44, 45, 46, 84, and 94 -for such honourable mention.

We are, Gentlemen, faithfully yours,

G. F. Bodley, R.A. R. NORMAN SHAW, R.A.

London: August 1902.

The five architects referred to in the report are:

- 20. Messrs. Austin & Paley, Lancaster
- 45a. C. A. Nicholson, 2 New Square, Lincoln's Inn, London, W.C.
- 68. G. Gilbert Scott, 40 York Mansions, Battersea Park, London.
- 71. Malcolm Stark, 11 Little College Street, West-
- minster, London, S.W. 95. W. J. Tapper, 1 Raymond Buildings, Gray's Inn, London, W.C.

Those honourably mentioned are:

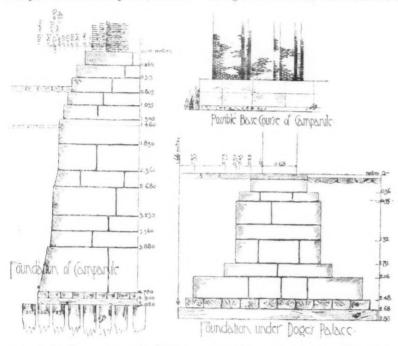
- 17. Sir Thomas Drew, 22 Clare Street, Dublin.
- J. Oldrid Scott, 2 Dean's Yard, London, S.W.
 A. H. Skipworth, 5 Staple Inn, London.
- 44. H. C. Corlette, 2 New Square, Lincoln's Inn. London, W.C.
- 45. C. A. Nicholson, 2 New Square, Lincoln's Inn. London, W.C.
- 46. F. Walley, 1 City Walls, Grey Friars, Chester.
- 84. James H. Cook, 12 St. George's Crescent, Liverpool.
- Reilly & Peach, Victoria Mansions, 28 Victoria Street, London, S.W.

The Campanile of St. Mark's, Venice.

Members interested in the Campanile should read a paper on the subject by Mr. C. H. Blackall, architect, of Boston, U.S.A., which appeared in the American Architect for 29th August 1885. The volume is in the Library. Mr. Blackall worked up his subject on the spot, and all that he could learn worth mention of the Campanile, and all that his own careful researches had then brought to light for the first time, will be found detailed in his paper. Mr. Blackall states that he searched in vain through the Venetian libraries for any exact documents relative to the foundations of the structure, and was finally obliged to investigate the tower itself in order to ascertain the conditions under which stability was ensured to it. The necessary permits for excavating were obtained, and a start made at the north-west corner of the Campanile. The excavation was attended with considerable difficulty, the water working through the loose upper soil and causing this to wash down so fast that sheet-piling was necessary. Every morning the pit was found full of water, and at least two men were kept at the pumps all day. This, Mr. Blackall believes, was the first time the Campanile foundations had ever been thoroughly investigated. The result is now of especial interest, and as his description of the foundations seems to give precisely the information which people are asking for, the following extracts are made from it:—

"The accompanying figure [see illustration] shows the actual arrangement of the foundations of the Campanile. The brickwork of the superstructure, it will be seen, rests directly upon five nearly equal courses of roughly-dressed stone, most of which is hard limestone. Three of these courses show above the present level of the piazza, and con-

courses of a brownish trachite, with which were used a few blocks of yellow sandstone and yellow trachite. Some of the limestone bore marks which seemed to indicate that the blocks had been taken from some previously existing structure. Indeed, the irregularity of the courses and the diversity of materials employed would lead one to believe that the builders simply utilised whatever material was at hand, without much uniformity of constructive planning. The Istrian stone used is exactly the same in quality as that which the Venetians still employ for foundations: a firm, close-grained material, rather hard to work, and



stitute all of the visible base. Immediately below these courses is a band of red Verona marble, 12 centimetres of which are above the level of the fifteenth-century pavement. The writer is inclined to believe that at one time the upper limestone courses were faced with marble on a line with the lower marble course, thus making a solid base for the Campanile 1·46 metres high, and 64 centimetres wide on top, as shown by the figures here given. This is entirely conjecture, however, as there are no indications of ties or anchors which might have secured such a facing; still a base of this description would add greatly to the appearance of the building, and would be by no means without precedent among just such structures of the same period.

"Below the Verona marble were found three courses of Istrian limestone, followed by two

possessing great strength. The masonry of the foundations is all laid in lime mortar of a rather poor quality. The tide-water rises in the ground nearly to the level of the old pavement, hence the work is constantly subjected to the action of salt water. The mortar was found to be much disintegrated, possessing little consistency and crumbling in the hand like hardened mud. The lime for the mortar was apparently made from Istrian limestone of the same quality as that used in the building.

"The lowest course of masonry is of green porphyry. The stone uncovered was a fine specimen, being shot through with small white crystals of feldspar and bits of black mica. Why the builders ever selected porphyry for such a place we do not know: perhaps it was cheaper to rob some old building than to send to the mainland for large

blocks. The course measures 90 centimetres in height, and the individual stones must be very wide, as there was no vertical joint uncovered in the width of the excavation.

"No attempt was made to ascertain the nature of the foundations under the inner portions of the tower, but it is fair to assume that the masonry is one solid mass. The work uncovered is in well defined courses of different heights, and the blocks are all more or less carefully dressed to a surface.

"The masonry of the foundations was found to rest directly on a platform composed of a double thickness of wooden beams, each 12 centimetres through, placed crosswise over each other. These in turn were borne by the piles, which, so far as could be determined, were driven side by side in continuous rows under the whole of the building. It was of course impossible to find out how long the piles were, but the diameters being on an average 24 centimetres, they probably extended a considerable distance into the heavy black clay composing the soil. The piles seemed to be of oak, and the platform beams of larch, a wood similar to our yellow or hard pine, though all of the woodwork was so thoroughly soaked in water, and blackened with age, that it was difficult to determine very much about it. The platform beams seemed the least well preserved. The wood could be broken off the outside with the hands, though the inside of the pieces was quite firm. The piles did not seem to have deteriorated in the least, but were as sound and tough as sap-wood. Large samples were cut from both piles and platform, but at this writing the water has not sufficiently dried out to say how free they are from rot. It is surprising that the wood has lasted as it has for nearly a thousand years. The water circulates very freely among the timbers, and during the time of making the last metre in depth of excavation, seven men had all they could do to keep the pit clear. The water flowed into the trench only through the timbers of the platform. and was quite clear and salt, showing it came directly from the sea. No wonder under such conditions that the wood should be stained and softened.

"An extra row of piles was found driven just outside of the platform, and entirely free from any direct bearing. That the settlement of the Campanile has been relative rather than absolute is proved by the fact that the tops of this outer row of piles are exactly on a level with the tops of those which bear the platform. This also shows that the slight obliquity of the tower is due not to any failure of the foundations, but rather to the general movement of the earth, for the tip is towards the side at which the excavation was made, and any derangement of the piles could easily have been noted. The weight coming upon this foundation is something tremendous. The bricks of which the superstructure is laid are very large. One of them which was measured was 44 centimetres by 30 centimetres by 7.5 centimetres.

about ten times the size of our common bricks. The masonry laid up with them will average about 105 pounds per cubic foot. These bricks are so large that they are made with two holes in the centre, by which the workmen can lift them about. Most of the bricks bear a stamp of some sort, and those who have studied the matter are able to tell pretty closely the date of a building by the stamps on the bricks.

"It was said above that the Campanile is one of the heaviest buildings in Europe for its size. The average area of masonry in cross section of the main shaft is 873.74 square feet, or nearly fifty-two per cent. of the total area of the tower. Counting the brickwork at 105 pounds per cubic foot, and the stone-work at 150 pounds per cubic foot, and allowing for bells, trusses, &c., the total weight of the tower is in round numbers 13,000 tons, whence the distributed load on the piling is somewhat over six tons per square foot, a load which would cause modern engineers to hesitate a long time before putting upon piles which are simply driven The foundations have, however, into the clay. stood the test of several centuries without yielding an inch; and one of the most valuable results of the investigation has been to fix a maximum of load which can safely be borne under such conditions. It is an interesting question how much the piles really support, for, as previously explained, they have no solid bearing, and according to the manner in which piles are usually driven in Venice, could not be relied upon for such a load as six tons per square foot. It is more than probable that their function is simply to hold the clay in one compact mass, the clay itself really bearing the load. Possibly such an hypothesis would explain why the builders added a row of piles entirely outside of the face of the foundations and affording no direct support, with the idea of binding the clay more tightly about the base of the tower.

Some fragments of the mortar of the fallen Campanile, brought home by Mr. Algernon Bourke, and referred to in his letter to the *Times* on the 7th August, have, through the good offices of Mr. P. H. Feilding, been sent to the Institute, and are to be analysed by the Science Committee when the work of the Session begins.

A slip in the proof-reading of Signor Beltrami's article in the JOURNAL for 26th July, p. 430, is pointed out by Professor T. Roger Smith. The depth to which the excavations were carried for the Campanile should have been given as 4.30 metres, not 84.30, as printed.

The late Emerich Steindl [Hon. Corr. M.].

The death is announced, at the age of sixtythree, of the eminent Hungarian architect, Herr Emerich Steindl, an Hon. Corresponding Member of the Institute since 1894. He was the architect of the Royal Polytechnic School, Budapest, in which institution he was for many years ProCHRONICLE 493

fessor of Mediæval Architecture. Other notable works of his were the Royal Opera House at Budapest and numerous churches in various parts of his country. His great work, the Parliament Houses of Budapest, had been for eighteen years building, and had but just reached completion, the formal opening being arranged to take place a few weeks hence. Only a few months

ago the Institute received from Herr Steindl a handsome collection of photographs, in which every part of this interesting work appears to be presented. The accompanying illustration shows the part of the building facing the Danube. The photographs have been mounted and bound in a single volume, and may be inspected in the Library.



PARLIAMENT HOUSES, BUDAPEST : THE DANUBE FRONT.

DUTIES AS TO DRAINS.—II.

By Algernon Barker, Barrister-at-Law (Newcastle-on-Tyne).

"Newly Erecting" or "Rebuilding."

THE next question is whether or not we are "newly erecting or rebuilding a house which has been pulled down to the ground floor." If we are doing neither of these things, we need not drain under section 25.

23. Newly Erecting.—First as to "newly erecting." If the site has never been built upon before, then the case is clear, but two other possibilities might arise. We might be building on the site of an abandoned building (whether it had been finished or not), or on the site of an unfinished building.

Again, our new house might not coincide with the site, or be in any degree of the same character as the previous building. Should we in such cases be newly erecting?

You may ask why I trouble about this; for you will say the building you are putting up must either be a new erection or a "rebuilding, &c." This, however, is not the case, and you may sometimes escape under both heads.

24. Previous Building Abandoned. - First as to the finished building and its total abandonment. If all intention to again use the previous building had been abandoned, the succeeding building would be "newly erected" (Lord Auckland v. Westminster, 7 Ch. Ap. 598, 606; Worley v. St. Mary Abbotts, 1892, 2 Ch. 404; Barlow v. St. M. A., 27 Ch. D. 362, 1884, and 11 Ap. C. 267; L.C.C. v. Pryor, 1896, 1 Q.B. 465; Alexander v. West End L.C.P.R.C., 31 L. J., Ch. 501. This case was on the Lands Clauses Acts, and see Robertson v. King, 1901, 2 K.B. 265, as to a dwelling-house not dwelt in, but quære). This we learn from the above cases, which, except Alexander's case, all deal with general building lines in the Metropolis. According to Alexander v. West End L.C.P.R.Co., the test is the irreparability of the decay of the previous We shall see that you can also abandon building. the old building by erecting a building of a totally different character on it, and so be liable as newly erecting, even though you left the old building untouched.

25. Previous Building Unfinished.—Now suppose that the previous building had not been finished. If it had been abandoned, a fortiori your building is a new erection. But suppose it had not been abandoned, would this make your house a new one?

Two hypotheses are before us: (1) You, being

 $^{*}_{*}{}^{\circ}$ Max = Maxwell on the Interpretation of Statutes, P.H.A. = Public Health Act. Lumley from henceforth = 1902 ed. (q.v.). The final addendum to Lecture as to Rights will appear.

building owner, begin the house yourself, and after a pause continue it. You are attacked under section 25 when you resume building operations. In this case you have from first to last been "newly erecting" your house, but the plea of unconscionable delay (par. 63) might be open to you. (2) Someone else has begun, and you have bought and are finishing.

In this second case much will depend on how far the vendor has carried his operations.

Suppose he built above the ground floor, you might plead the spirit of the section, which excuses building owners who, in "pulling down," leave a portion standing above the ground floor. Why, you might ask, should not a brick built above that limit excuse as well as a brick left above that limit? But the surveyor would argue that, according to the cases as to Michelangelo Taylor's Act, the unfinished house was no house, and your addition therefore a new house. These cases you could distinguish, and cite R. v. Adams (see par. 30, sub-par. 3) in answer. You would say that you might be erecting a new house in one sense, but you would not be "newly erecting" a house, for someone else has begun the work. Perhaps this looks like the quibble of a lawyer or a Talmudist, but I think it is true. The surveyor would answer that the vendor's erection was not even a "building" (Wendon v. L.C.C., 1894, 1 Q.B. 812) (general metropolitan building lines), R. v. Manning, L.R., 1 C.C.R. 338 (building nearly finished); contra Williams v. Wallasey, 16 Q.B.D. 718, general building line, but distinguishable as "bring forward" used. (Ravensthorpe v. Hinch-cliffe, 24 Q.B.D. 168, on P.H.(B.S.)Act. See also Lord Auckland's and Alexander's cases, ubi supra. These cases would, I think, be distinguishable, and could not prevail against the spirit of our section. You might also sometimes plead conscionable delay and standing by (par. 63) in that the vendor, whose rights you have bought, was led to lay out money in building, and you to pay the price you did, in the belief that the drains had been tacitly approved by the local authority.

If the vendor's house had reached no further than the ground floor, the surveyor might in his turn plead that the spirit of the section made you liable, and his argument that your house was a "new house," none having preceded it, would be the stronger the more unfinished the building which you bought and continued. But, this being a penal section, its "spirit" could not be pleaded, since it would be construed strictly in your favour, and, as I said before, erecting a "new house" is not [quite the same thing as newly erecting a

house. I should, however, be sorry to be in your position, unless you could also plead "standing

by."

If the vendor had only built a wall or cowhouse, or begun a building of quite a different area from the one you are engaged upon, then, I think, you would be liable (as we see in par. 26), and, in the case of previous wall or cowhouse, there would be no "standing by," since they did not need to drain under section 25.

If you are not liable, of course it will not affect your legal position that, in order to finish the house, you have to pull down part, unless, indeed, you pull down to the ground floor.

Unless you are yourself an offender of newly erecting, you do not take over with the land the vendor's liability, which, if he has offended against the "useless" of the section, will cling to him

personally.

26. Subsequent Building of a totally different kind. Suppose, however, that, though the previous building has not (at least otherwise) been abandoned, and is sufficiently finished to count as a building, will your superstructure be under the section if it do not coincide with its site? You will be under liability to drain if you put up a building of a totally different superficial area, for you will be held to have abandoned the old building (L.C.C. v. Pryor). A building only slightly smaller would not matter. The cases under section 159 as to "New Building or merely addition" (i) do not apply at all, since there it was "building" and here it is "house"; there it was "new building," here it is "house newly erected"; and, further, a special artificial meaning is given to "new buildings" by that section.

27. Rebuilding a House Pulled Down to the Ground Floor. - But then, suppose the house is not newly erected, the surveyor may say we are "rebuilding a house "which has been pulled down to the ground floor." As to this "rebuilding, &c., many questions arise. Will a voluntary pulling down bring you under the section, or is a building pulled down when a fire has gutted the greater part of it? Then, how complete a demolition will bring us under the section-how complete horizontally, i.e. will one wall completely demolished be sufficient? and how complete vertically, i.e. is it sufficient to take off the roof?

28. If Voluntary, Method of Demolition Immaterial. If it be voluntary, any method of demolition, be it pushing or burning or blowing down, will bring you under the section. The housebreaker often pushes a house down. Numerous cases may be referred to on arson and riot to prove this (R. v. Langford, R. v. Harris, and R. v. Simpson, reported Car. and M. 602, 661, 669 respectively; R. v. Howell, 9 C. and P. 454, Max. 396b).

But voluntary the demolition must be. An accidental destruction will not deprive the rebuilder of his rights to escape section 25 on the

ground that he has not pulled down. The word in our section clearly points to voluntariness. Section 74 of the Metropolis Management Act of 1862 (its repeal in 1894 does not concern us), shows that a distinction was drawn between "taking down" and burning down; for compensation was given if the local authority interfered after an accidental fire. This last argument, however, cuts both ways (j1).

Then, again, to take a wider sweep of vision, we see that an involuntary abandonment of a building would not have made its successor a building erected for the first time, so as to bring the landowner within the grip of the law as to general building line, and so we may on the same broad principle gather that the Legislature does not here confiscate a man's vested rights until he voluntarily abandons them (Lord Auckland v. Westminster, 7 Ch. D. 597, quoted Worley v. St. M. A. K. 1892, 2 Ch. 408, q.v., 409 bottom; Barlow v. St. M. A. K., L.R., 11 Ap. C. 769 bot.; L.C.C. v. Pryor, 1896, 1 Q.B. 465).

20. Pulling Down After a Fire. - Another question arises. After a fire, may the unsafe part of the house (at least) be pulled down without bringing us under section 25? Yes, for the fire has really done the demolition, and a wind, or the law as to dangerous structures, together would complete it.

30. How Complete Need Demolition be, generally? The answer is that unless every vestige of the building has been pulled down to the ground floor,

the rebuilder is not under section 25.

In A.-G. v. Hatch (1893, 3 Ch. 36), a case as to prescribed building lines under the P. H. A. s. 155, which is in agreement with Masters v. Pontypool, we are told that unless the demolition was complete the section did not apply, though a few bricks left standing would not matter. Ours is an a fortiori case, for in section 155, with which the above cases dealt, compensation was given, and so that section would be construed less strictly, i.e. less complete demolition would be required to bring the section into operation than ours, which contains a penalty and no compensation. Then, again, the words, "to the ground floor," are absent from section 155.

In Alexander v. West End (31 L. J., Ch. 501), a case on compulsory purchase, where the Act would not be strictly construed, it was held that only if a house was reduced to a mere heap of bricks could it be said to be demolished. (Gordon v. Gordon, 1894, 2 Q.B., at page 749, a case on Michelangelo Taylor's Act as to compulsory taking, which says, "If you divide a house, you have no house," is not in point, for there, again, there was no mention of "ground floor.")

Then there are cases as to pulling down by rioters. In R. v. Adams (Car. & M. 299) we are told that, to make the accused liable, there should be a complete demolition so as to leave the house no house, though, according to R. v. Langford

(ibid. 604), a few stones or a chimney left standing would not matter. In these cases, where the total demolition would mean imprisonment, the Court naturally construed strictly, and leaned to the opinion that the accused had not totally demolished.

The case of James v. Wyvill (51 L. T. [N.S.] 237) is more applicable as regards the particular matter now discussed, for it deals with the defini-tion of "new building" in section 159, which uses the words "pulled down to the ground floor." Here also the Courts would, as in ours, if possible, not hold a building to have been pulled down, since so to hold would open the door for penalties under by laws. This case tells us that the building must be all, or nearly all, pulled down (to the ground floor) in order to come under the definition.

According to a building line case, Robertson v. Greenock (21 Sc. L. R. 215 and 306 note), "taken

down " means wholly taken down.

So we see that, even where the Courts had no strong reason for requiring total demolition to have taken place in order that they might say that the building had been "taken down," and where nothing was said as to "ground floor," the house had to be nearly all demolished in order to bring people under the section. In our case the Courts would, if possible, not hold the house to have been pulled down, since a pulling down to the ground floor, plus bad drains, would mean a penalty, and the Courts lean against a construction which would penalise. I go further, and say that as the Act has left a margin, i.e. the walls below the ground floor, we need not (in spite of James v. Wyvill) imply any further margin, since the express excludes the implied (Max.).

31. How Complete Horizontally ?-Now, we may ask, How far need the demolition extend horizontally in order to bring us within the section? Clearly to every part of the house, and clearly not to detached outhouses nor to any adjoining buildings, for these are not part of the house; nor yet need it extend to a party wall or an adjoining privy, or other place held in common with a neighbour. I refer to my previous remarks as to "House, part of, or not "(par. 20, end).

32. How Complete Vertically ?- Then, how far down need the demolition extend vertically so as to bring section 25 into operation? Clearly down to, and, as we have just seen, quite down to the "ground floor." But what is the ground floor?

33. "Ground Floor."-The Century Dictionary defines this word as "the floor which is level, or

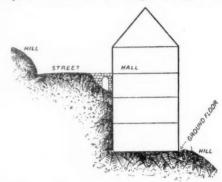
nearly so, with the exterior ground."

But at what side of the house, whether at visitors' entrance or street, or where, is the "ground" to be looked at? At the lowest side.

Everything depends upon context and purpose. If I am a gouty old gentleman writing to a landlady for a "ground-floor room, because I object to climbing staircases," it is clear that I mean the front-door floor. If a honeymooning couple write to say they "don't want the ground floor, as one is so apt to be overlooked from the street," then it is clear that the street side of the house is considered. If, again, the landlady is asked for a ground-floor room, so that the children can easily get in and out to play in the fields behind, then clearly the ground floor at the back is meant.

Now the plain intent of our section was that a house very nearly pulled down, and not one hardly pulled down at all, should come under section 25.

If any of the above sides for ascertaining ground floor were taken, then a man whose entrance and street fronts have both only one story, as shown in the diagram, might have



to drain under this section, though he only took down the top one of perhaps four stories. This would be absurd. It is clear to my mind that the ground must be looked at at the very lowest (of course external) side of the house.

From this it also follows that, if along that side the ground is uneven, the very lowest level of the ground must be treated as the ground level.

On the other hand, an excavation round the house cannot be considered in taking the ground level; for we know that there are such things as basements with areas.

On the same principle, though in seeming contradiction to the definition, I should hold that in a one-storied house which, having its floor below the ground, consisted solely of basement, the basement would be the ground floor, otherwise a very much more partial demolition than was required in the case of an ordinary house would bring the owner under the section. This would not be fair; but I have never heard of such a house except in the Salt Districts.

One more less exceptional case will be a flat. A flat can only be said to have been "pulled down to the ground floor" when the ground-floor flat and all the flats above it have been demolished, as we saw in discussing "Division by Floors" (par. 21).

I can give no clear authorities. Perhaps cases

which may in future be decided as to cellar dwellings, or Workmen's Compensation Acts, may be of use, but I think a general view of the purpose of

the section is more helpful.

We may therefore define a ground floor as a floor which is level, or nearly so, with the lowest part of the ground lying along the lowest side of the house, the bottoms of excavations round the house not being considered as ground level but as below it, except in the case of the one-storied house we have described.

34. When Newly Erected. Summary. - I may now

sum up this part of my lecture.

A house is newly erected if it succeeds a building which has been totally abandoned, or perhaps a very unfinished building though it has not. There will be a total abandonment if the succeeding erection is of quite a different character

from its predecessor.

35 When Rebuilding of House Pulled Down, &c. Summary.—A house is held to have been pulled down to the ground floor, so as to bring its successor under the Act, if the previous house has been voluntarily demolished in any manner, though you might freely pull down the part which has been rendered unsafe by fire without bringing the succeeding house under the section. The demolition, in order to make you liable to drain, must be absolutely complete and extend to the ground floor, as judged from the lowest ground level at the lowest side of house (areas excepted).

Offences of Erecting (or Rebuilding) and Occupying.

We have thus seen whether we are under the section. Before proceeding to discover what must be done to obey it, we will first of all consider the two crimes against which the section is levelled so far as they affect the building owner.

As regards the first, viz. erecting or rebuilding, I showed in par. 3 how wisely the Legislature acted in not waiting until the building was occupied before it insisted on proper drains. The drains must be the first work to be done ("unless and until"). The penalty is stated in the section,

and is recoverable summarily.

36. To Make Occupation Punishable, must be either a House by Plan.—As regards the second, viz. occupying, I have already made certain remarks in par. 5. I need make no apology for dealing with it, for why put up a house with bad drains (even if this were legal) if it cannot be legally

occupied?

We have already seen (par. 4) that, if a building contains the usual marks of a house which is habitually used for the purposes of human, many-houred, indoor inhabitancy, whether by day or night, and thereto has the necessary capacity and permanence, and has doors, windows, roof and walls, and perhaps chimneys, it is a house by plan, though not as yet so used. We will now see whether the converse is true, viz. that if so

used it becomes by occupancy a "house," though it does not contain all the above characteristics. Except where the case comes under the definition clause and people are instructed or employed there, I think not. It would be absurd to hold that when the section says "or to occupy any house so newly erected or rebuilt" it means, according to the common-law meaning, by the word "house," something quite different from what it meant when it said "newly to erect or to rebuild any house, &c." (See "House, part of or not," and references in note $(j \ 5)$.)

Thus I have heard of excavators of waterworks sleeping in the unlaid waterpipes. So, again, a building owner might put up a pigstye and then let tenants live there. The contractor for the waterworks and the building owner are not liable under this section, for the pipes and pigstye are not "houses by plan," nor yet are they schools, factories, or buildings in which persons are em-

ployed.

37. Or under the Definition Clause.—Where, however, the building comes under the definition clause as being a school, a factory, or an "other building in which persons are employed," this degree of housiness is not necessary in order to make us liable for "occupying," though, as we have seen, if there is not a covered building of sorts and if the instruction or employment is merely momentary, spasmodic, casual, or temporary, then the building does not become a "house by use or employment." Of course, if no one is taught or employed in the building, then it is not under the definition clause; but if it is "housy" in structure, then any occupation of it becomes illegal when proper drains have not been made under the section.

38. Occupation Punishable by Indictment and Loss of Contract.—The punishment for "occupying" is indictment, since no fine is inflicted (Archbold, Crim. Practice, ed. 20, p. 2, bottom), and the person who lets it or occupies it could not recover rent or enforce a contract of service there, for the contract would be tainted with illegality.

39. Occupier who.—The master, and not the servants or workmen, would be liable for occupying a drainless "house," school, factory, or building

in which persons are employed.

The erector is not as such the occupier, for occupying or causing to inhabit is not the same as "erecting" (Pearson v. Kingston-on-Hull, 3 H. & C., 921, 35 L. J., M.C. 36, 11 L. T. 317, Max. 474c).

40. Punishments for Bad Landlords of Non-Houses and of Premises not under Section 25.—If, however, the landlord lets any building, whether it were a "house" in the sense given in this section or any inhabited building [see Section 29, Housing of the Working Classes Act, 1890 (definition, dwelling-house), and Section 75, ibid.], where the rent does not exceed £8 (in London and City £20, Liverpool £13, Manchester and Birmingham £10, elsewhere £8), he would be held to warrant the

drains. Nor could be get much damages for the use and occupation of a building whose annual value was not over £8 and which was badly drained (see Max, 557).

The offence of allowing insanitary premises of any kind which do not come under the term "house" to be occupied is punishable under the nuisance sections of the Act (Stone's Justices' Manual, 901, and the "Nuisance Method," post.) Canal boats are dealt with under the Canal Boats Act, 1884. So, though these premises and boats are not forced by this section to have good drains, any want of sanitation is dealt with by other means.

I may remind you of what I said at the outset of this lecture (par. 9), viz. that other people are otherwise protected, but the man who goes to live in a "house" has reason to expect the law to see in a special manner that the same is not a death-trap and a whited sepulchre.

Council's Orders on Surveyor's Report.

Now to consider the orders which may be given as as to drainage. It would be wise to know what is lawfully required before choosing the position of the house or deciding on the level of its lowest sewage fount, and, in cases of rebuilding, even before making up your mind to what extent to demolish. In any case it would be well to be sure of one's duties under this section before placing superstructure on foundations, as alteration of drainage beneath the house would be the more difficult as the building advanced.

41. Summary of Remaining Questions as to what must be done under the Penal Method, Section 25.—What, then, are your duties, if you come under this section?

They are twofold, viz. structure and destination. First, as to structure. There must be a covered drain or drains as far as the legal destination, and the drain or drains must be in accordance with the proper (par. 65) orders of the Council, duly exercising their discretion (par. 65) on the report of the surveyor, in five respects, viz., number, size, materials, level, and fall (par. 69-73).

Then as to destination (par. 78-84), the two kinds are sewers and cesspools (or other places), according to the position of the house.

42. Summaries as to Structure and Destination.—I propose to deal with the provisions as to structure very much in the order given in the Act. I shall consider who the surveyor is, what discretion he is given, whether a valid report is necessary, what facts it must contain, whether the authority need follow it, whether the surveyor need report, and what power he has of entering to inspect to see what you shall do, whether you have done it, and to connect drain with sewer (pars. 48–49).

Then I shall go on to consider the Council's discretion, discussing among other things their power to alter the level of your house (pars. 54

and 73), and also who can investigate, who can give orders, and who can deliver them (pars. 57–62). I shall show that, though a valid surveyor's report is a *sine quá non*, and its facts must perhaps be followed by the authority, the Council have a discretion (the rules as to this discretion are summarised in par. 65).

After this I shall consider what will happen if the Council's orders are partly valid and partly invalid (par. 66), whether they are estopped from giving orders because they approved of the drains of the previous house (par. 67), whether they need give orders and can disclaim such a power (par. 68).

We then ask, what are drains? (par. 69), and we deal with number, size, material, level, and fall (pars. 70–73), discussing under the latter head the question whether the authority can alter the level of your house (par. 73). We then ask, as to the words "necessary for the effectual drainage of such house," what standard of necessity and effectuality is set up (par. 74), whether drainage need be of roof-water or field-water (par. 75), whether the words "of such house" imply "of its sinkless cellar" (par. 76), and "of its outhouses" (par. 77).

Summary as to Destination,-The next point which will occupy our attention is Destination. First, as to sewers, we ask whether the drain-owner or the authority or neither can choose which sewer shall be used when there are more than one within the 100 feet (par. 78), what kinds of sewers can be used (par. 79), in what the authority's "title to use" consists (par. 80), whether the sewer need be of "sufficient size" (par. 81). We shall then ask how the 100 feet must be measured, when we shall see that only an available sewer need be used, and that these words do not require a builder of a house below the sewer to raise his site (par. 82). Then we go on to consider the meaning of "site" and "house," and whether a large park, or even the site of an outhouse, is part of the site (par. 83). Secondly, as to "cesspools and other places, we consider nine questions which you will find under that head (par. 84).

Other Matters.—Finally, concluding the penal method, we consider the penalty and punishment for erecting or occupying, and (par. 85) the question as to who pays for drains, sewers, cesspools, and "other places" (par. 86).

Structure.

43. Surveyor's Report.—First, as to the surveyor's report. We ask who is the "surveyor"? What discretion has he? Is a valid report by him a sine qua non? What facts, &c., must the report contain? Need the authority follow it? Need he report? Can he enter to inspect?

44. "Surveyor" who.—This section applying only to an urban district, a stop-gap or assistant surveyor cannot report (Lewis v. Weston, ubi

supra, and in previous lecture); but, excepting as to election, the drain-owner cannot impeach the survevor's title. (Smith v. Hirst, 23 L. T. [N.S.] 665.)

45. Surveyor's Discretion. -The surveyor's discretion is the same as that of the Council detailed later on (pars. 50-65, especially 65 summary), but since his function is only to act as the eyes of the Council, the analogy must be applied mutatis mutandis. So we may say that the surveyor may make mistakes, but his report must be the result of an honest endeavour to describe things as he thinks he himself saw them after due investigation, and must be given within reasonable time. This rule expresses the whole analogy.

46. Valid Report Essential. Authority must Accept its Facts, but not its Conclusions .- The Council, as we shall see, cannot (at least, in my opinion) make orders, unless there is a valid report.

The Council need only accept the facts stated

in this report (see par. 59).

47. Contents of Report. The report must be a "report"-that is, a statement of facts and premisses sufficient to allow the Council to make its conclusions. It must not be too vague, or be a draft order or a mere statement of cut-and-dried conclusions and opinions.

48. Need Surveyor Report?—Unless the Council requires it he need not do so, but he cannot disclaim such power or agree not to exercise it (Lewin,

49. Entering to Inspect or Connect. Can the surveyor enter our land to see what we ought to do, and later, to see if we have done it? Yes, plainly (l), if he first applies to a magistrate under s. 305, and the latter grants an order to enter.

50. Council's Discretion. Valid Report by Surveyor a Condition Precedent.-Next as to the Council's discretion (see complete summary and references to what follows in par. 65). A report by the surveyor is a sinc qua non to the Council's exercise of its discretion, but need this report be a valid one? I think it must, in spite of Matthews v. Strachan (ubi supra). We must give proper weight to the words "on the report of the Surveyor." For the same reason the Council must act on the facts contained in the report (see par. 58).

51. Council's Discretion may be Inaccurate or Harsh. - We have only to read the words of the section to see that in giving orders authorities have a discretion which neither magistrates nor higher

Courts can review (par. 65).

There are numerous cases on "discretion" which show this-e.a. Matthews v. Strachan, 1901, 2 K.B. 547, R.I.B.A. JOURNAL, July 1901, p. 440, 85 L. T. 70; Hargreaves v. Taylor, 32 L. J., M.C. 111 (on P.H.A., 1848, section 54); R. v. Silvester, 1862, 31 L. J., M.C. 93 (licensing); V. of St. James v. Feary, 24 Q.B.D. 703 (privies); Austin v. Lambeth, 27 L. J., Ch. 388 (materials of drain in this [25th] section, see par. 72); Lewis

v. Weston-super-Mare, L. R. 40 Ch. D. 55 (on P.H.A., section 16, as to surveyor's report as to necessity for compulsory access); see last lecture, Part II., Max. 172, 173; Stroud v. Wandsworth, 1894, 2 Q.B. 1; Kinson v. Poole, 1899, 2 Q.B. 41. and 81 L. T. 25; L.N.W.R. v. Westminster, 1902, 1 Ch. 269, and 18 T. L. R. 74 (placing urinals in streets); Pethick v. Plymouth, 8 R. 107; 70 L.T. 304; 58 J.P. 476; and Mason v. Wallusey, 58 J. P. 476, 477, on same subject, and generally see Max. IV., section 2, especially p. 310.

Nor will a plain mistake of fact, i.e. an inaccu-

rate exercise - (Smith v. Chorley, 1897, 1 Q.B. 678, Max. 326), nor a harsh exercise (Folkestone v. Woodward, L. R. 15 Eq. 159) of this power take

it away.

52. Must be Mature. - The discretion, however, must be mature, i.e. on due consideration of the matter (e.g. Campbell v. Gillespie, 1900, 1 Ch. 288, but cf. Re J. Hargreaves, 1900, 1 Ch. 353), and urban councils are, as we have seen, by this section required to first obtain the surveyor's report

(Lewis v. Weston, 40 Ch.D. 69).

53. Must be Unprejudiced. - Then, again, the discretion must be unprejudiced, i.e. not clogged by general rules (other than legal by-laws) [Bew v. Bew, 1899, 2 Ch. 467; In re Hope, ibid. 685 (cases as to judges); Nichol v. Epping U. C., 1899, 1 Ch. 844; Tinkler v. Wandsworth, 27 L.J. Ch. 342; Wood v. Widnes, 1897, 2 Q.B. 357 (cases as to privies); R. v. Silvester, 31 L. J., M.C. 33 (1862) (licensing case), and see Max. 175, d, e, 176 a, b, c, &c.], for these would cast suspicion on the genuineness of their inquiries (Wood v. Widnes, 1897, 2 Q.B. 357, and see Frost v. Fulham, 1900, 82 L. T. 720, 64 J.P. 629, on section 21 P.H.A.)

A recent case which seems to contradict this only has reference to orders under section 21, where general regulations were specially allowed.

54. Must be Relevant.—The discretion must be relevant, must keep within the scope of the Act, as gathered from its language (j, 2), and must not be swayed by extraneous matters or used for collateral purposes, not even to keep within the fancied spirit of the Act (j, 4). [Tinkler v. Wandsworth, see par. 53; Stockton v. Darlington, 9 H.L.C. 246 (as to railways taking lands) County C. of West Riding, 1896, 2 Q.B. 388 (licensing theatres); Postr.-G. v. London, 78 L. T. 180 (vetoing telephone wires to secure a better service); Max. 171b, 174c, 175b, 335d, 417b, 504d. And see cases below.

Thus in Matthews v. Strachan (R.I.B.A. JOURNAL, July 1901, p. 440, and L. R. 1901, 2 K.B. 540), (but see pars. 66, 70), we see that the local authority cannot by orders under this section regard the general drainage of the district, and its facilities for sewage disposal, and thus enforce two drains, one for surface-water and the other for sewage, when this was quite unnecessary for the effectual drainage of the house

itself. But they could do so, if they thought it was requisite for the effectual drainage of the house. (They could also effect this object by a by-law.)

So, again, Lumley tells us that sewers cannot be enforced under this section, and see R. v. Tynemouth, 1897, 75 L. T. 86; Clarke v. Paddington, 5 Jur. [N.S.] Pt. I., 358, and Lumley, 63 (1902 edition).

Nor can the authority make the fall of the drain steep in order to force us to build higher up a hill (R. v. Preston, 3 T. L. R. 665, and St. Martin's v. Ward, 1897, 1 Q.B. 10 (par. 73).) (Cary's case, 11 L. T. 339, tells us that the level of a street can be prescribed under section 157 for the sake of smoothness, but not for the purpose of meeting a hill in another street. Of course this case only applies to the above question as to level of drain in that it requires relevance. The Board can lower the end of your drain to any extent, but cannot raise its beginning higher than your lowest sewage fount.

Nor can they make orders with a view to preventing you from pouring into a neighbour's drain and making it a sewer. This would be an "economical discretion" condemned in R. v. Newcastle (1889, 53 J.P. 788, 60 L. T. [N.S.] 963, and 5 T. L. R. 467), (contra, see opinion J.P., vol. 65, p. 283), and perhaps see the Newbiggin case, North Mail, March 12th, 1902, when fully reported. (Newbiggin was defendant before the Lord Chief Justice.)

55. Must be Honest,—And of course the discretion must be honestly exercised (R. v. Tynemouth, R. v. Greenwich, and Postmv.-G. v. London, see last lecture, R.I.B.A. JOURNAL, 27 July 1901, p. 442, col. 2). Nor must it be forced by duress. To attack it on these grounds would require a clear case.

56. Reasons need not be given.—This being so, need the Council give reasons for their orders. They perhaps need not even allude to the section to show their authority, since they can validly exercise powers of whose existence they are unaware (Max. 326 a, b), and no reasons except a woman's reason need be given. They need only use the American expression "because" (m).

57. Delegation of (I.) Seeing, (II.) Judging and Ordering, (III.) Delivering the Orders.—The Council must delegate the function of seeing to the surveyor, may delegate the power of judging and ordering to a committee, and may allow any agent duly accredited by them to deliver their orders.

58. Seeing.—The Council must follow the facts contained in the surveyor's report as to the lie of ground, nature of house, means of flushing, &c. They must use the surveyor as their eyes (Sherborne L. B. v. Bogle, 46 J. P. 675). For the only alternative would be a proper investigation by every member of the Council, which would be absurd and rather inconvenient, and to permit even this as a substitute would be to ignore the words "report of the surveyor." If,

however, the reader thinks that the cases of Matthews v. Strachan (ubi supra) and Nichold v. Epping Urban Council (1899, 1 Ch. 844, at p. 851) modify this view he is at liberty to do so.

59. Judging and Ordering.—But the Council cannot delegate the power of originating orders and judging what is "necessary." It is to them that the necessity must "appear," and we must not ignore the words "appear... to the urban authority." The surveyor is their eyes, and his facts should be their facts; he is not their brains, and his opinions and conclusions need not necessarily be theirs.

I have two further reasons for thinking this power cannot be delegated, though, if the surveyor's orders are impliedly or expressly ratified by a Council which has exercised a legal discretion as above, then they become valid.

My first reason is that this is a discretionary trust, and such cannot be delegated (Lewin, Trusts, 279). This principle was followed in the above case of Cook v. Ward as to sub-committees. The other argument is that, since express power to delegate to committees was given by the Act, this takes away all implied powers (even if there were any) of delegating to anyone else.

The cases of Austin v. St. Mary, Lambeth, and of Stokes v. Haydon, rather favour than contradict this opinion, though they show that ratification by the Council will make the surveyor's orders valid; the former case also showing that if the surveyor has not required more than the Council specifically ratify, a previous general delegation will not invalidate the order.

60. But Subsequent Ratification Validates.—That subsequent specific ratification will make valid a surveyor's order is seen from the recent case of Stokes v. Haydon (84 L. T. 531) on the section dealt with by Austin v. St. Mary, Lambeth (n), and the latter case proves that this is so even when the ratification is after a date fixed by law for the original order. I think, however, that the ratification must be known to the building owner within a reasonable time (par. 63), or at least that it cannot affect him if after such reasonable period has elapsed he has done work which the order would make useless.

61. Power of Judging and Ordering can be Delegated to a Committee.—The authority is expressly given power to delegate to committees under section 200 of the Public Health Act, 1875, and the orders of such committees outside the Metropolis do not need the approval of the Council (St. Leonards v. Holmes, 50 J. P. 132). The committee cannot, however, sub-delegate its powers to its members, but must act as a whole (Cook v. Ward, 2 C.P.D., at p. 263). Firth v. Staines, 76 L. T. 496, 500, is not in point, as it deals with quite a different statute, which required the Council to confirm the committee.

62. Delegation of Delivery Allowed. - From the

necessity of the case the power of delivering the orders so made can be delegated to any agent. Delivery being a merely mechanical matter, intermediaries could be employed (see Miles v. Bough; Brown v. Tombs). But the agent must be duly accredited.

63. Must Exercise Discretion Punctually. - Next, the discretion must be punctual. The authority cannot unduly delay the building owner and keep him waiting for an unconscionable length of time. I do not mean that he can force them to make orders. But if they still remain silent after he has waited a reasonable time, I think he can begin to build, carrying out their subsequent orders so far as they do not disturb or spoil the work he has done. We have just seen, however (par. 60), that their ratification of the surveyor's orders may be delayed (Austin v. St. Mary, Lambeth), but there is nothing unreasonable there. The builder knew what was or would be required. I withdraw my opinion given on this matter as regards regulations and orders under section 21 in my previous lecture on "Rights as to Sewers," Part II., though this is an a fortiori case for punctuality. This is such an important point that no apology is, I think, needed for discussing it at length. What length of time is unconscionable is considered in the appended note (o).

64. Orders must not Lead to Nuisance.—To these rules I may add one more, viz. that a nuisance must not actually occur from the absurdity of the orders, or they will be held bad (Lamacraft v. St. Thomas, 42 L. T. [N.S.] 365).

65. Summary as to Discretion to Give Orders.—Now we sum up the rules for the exercise of this discretion. It may be mistaken and harsh (par. 51), but it must be mature (par. 52), unprejudiced (par. 53), relevant (par. 54), honest and not under duress (par. 55), and need not be accompanied by reasons (par. 56). Also it cannot be delegated except to a committee (par. 61), cannot unduly delay the building owner (par. 63), and must not lead to actual nuisance (par. 64).

As to form, the orders may be verbal, and may be delivered by agents (par. 62). If the exercise of the discretion breaks the above laws it can be upset, either wholly or in part; but if it does not, no tribunal on earth can touch it. It cannot be revised by the High Court nor by Justices of the Peace, and of course not by their revisory Court, the Quarter Sessions, under section 269. Nor is there any appeal to the Local Government Board under section 268, since under this section no "expenses" are recoverable. We have seen that the power of investigating must, and the power of delivering orders may, be delegated.

Now we will consider what would happen if the orders were invalid only in part.

66. What if Part only of the Order Tainted?—If any part of the order were invalid, the whole would be tainted, unless the invalid portion could be

separated from the rest. The general law as to this is contained in books and cases on trusts, contracts, and by-laws (e.g. Lewin, 116, not very helpful; Pollock, Con., 350), but I may quote specially Max. 564, et seq.; Wood v. Widnes (1897, 2 Q.B. 357, and 1898, 1 Q.B. 463); and there are other privy cases, in which it will be seen that no "expenses," even pro tanto, were recoverable by the local authority (St. Martin's v. Ward, 1897, 1 Q.B. 40). (But see Chitty's Statutes, Public Health, 50 (d); McOmish v. Glasgow, 1898, A.C. 432; Hall v. Potter, 39 L. J., M. C., 1; R. v. Lundie (1862), 31 L. J., M. C., 157; R. v. Favershum (1867), 8 T. R. 532).

In my opinion, until the Council withdrew the bad part of an order, the whole would be bad if the illegal part of the scheme in any way affected the part that would otherwise have been legal, as in the illustration I am about to give. Thus, suppose that a Council desirous, not of draining our house in the best way, but of promoting some excellent fad about keeping flood-water out of the sewers of the district generally, ordered us to put two drains—one for flood and another smaller one for sewage. This order, owing to its motive (see "Number" of Drains, post par. 70), would be bad (pars. 54 and 75) (Matthews v. Strachan).

Suppose we cut out of the order the larger drain, which we hold to be wrongly prescribed, the order thus revised by us would be bad, because plainly it was not intended by the Council to make such an absurd order. So, whether unrevised or revised by us, the order would be bad.

The Council can cure it, but they must do so within a conscionable time (par. 63) from our notice to them. For the drain-owner cannot, as we said, be expected to cure it himself, and a void order is no order. If the Council cut out the bad part—even if it were absurd—yet, unless it would lead to "nuisance" (par. 64), we would have to obey, for the exercise of the discretion would at the worst only be "erroneous."

But, if the Council do not, even the whole Bench of Judges could not cure it, for that would be to usurp the powers of the Council. Judges will not patch up or make a crazy-work from good remnants of contracts or by-laws or orders for other people; and if they did it would be too late. The conscionable time would have passed.

But suppose that the part which was imposed under an invalid exercise of the discretion in no way affected the part imposed under a valid exercise, then I think the case would be different: it would be as if there were two distinct orders regarding two different houses.

67. If Drains of Previous House Approved.—If the local authority induced us to pull down an old building by saying that the old drainage system would do, then, unless this was done so long ago that circumstances had changed, their silence

would amount to approval of the old or of a reproduction of it, and they could not give fresh orders (Masters v. Pontypool, L. R. 9 Ch. 677).

68, Need the Authority give any Orders, and can they Disclaim?—Hitherto we have pictured an over-enthusiastic Council and a grudging drain-Now we shall see that the authority cannot be forced to give us orders unless they wish. Not under section 299, for that relates to sewers only; nor by complaint through Parish Council to County Council under section 16 of the Local Government Act of 1894, for though this allows enforcement on the authority of its sanitary duties, it does not say giving orders is a duty. The medical officer's report under the 1888 Act, section 19, could only lead to remonstrances and not compulsion. (As to these, see last lecture on "Rights," Part III.) No other statute allows such compulsion. Section 25 is not compulsory on the Council, for there is no private individual or body or class, or (as we have seen) any public body having under the terms of the section a vested right to its exercise (Max. 341, 342, 345b, 346b).

This point may be of very great importance where your neighbours have bad drains. You can insist on the Council having good sewers; you cannot insist on their insisting on other fellowcitizens having good drains under section 23. You may have other means of reforming your neighbour. Action by the Council under section 23, in the case of "insufficient drains," is compulsory (see later).

The authority, however, cannot disclaim this power, for this is a public trust, and only by legally resigning his office or by delegation to a committee on which he does not sit can a councillor prevent himself from giving orders (cf. Lewin, 210). But if the Council express satisfaction with your plans or wait too long, then, of course, they cannot give further orders.

Number Size, Materials, Level, and Fall.

Now we come to the above five structural points as to which the urban authority can give orders to the drain-owner.

69. Drain or Drains What?—But first we ask, does "drain" include the soil and lead pipes, &c., within the house? The Metropolis Management Act, 1855, section 75, in a similar section added to the word "drain" the words "and such branches thereto and other connected works and water supply," so that these also had to be to the satisfaction of the proper official. From this one would think that as our Act made no mention of such they are excluded (analogous reasoning, par. 73, q.v., and refs. to Max., and see note j, 1.).

We see from last lecture (addendum of 1902 to p. 377, col. 2) that "sewer" includes the whole apparatus but not a pumping station. This, however, is not to the point. If my contention is

wrong, and if a drain accordingly includes the sink-pipe, a sink includes a jug, which is absurd. Also the evidence from context to the Metropolitan Act (as above) distinguishes our case. Glasgow Corporation v. McOmish, 1898, A.C. 432, is distinguishable, as the Police Act there in question expressly defined drains as including sink conductors, &c.

Roughly speaking, only horizontal pipes, and even then not the small leaden ones, can be " drains." As to these, subject to by-laws, if any, you are free.

As to a gutter down-pipe, I suppose that the case of Holland v. Lazarus forces us to hold that these are drains. The fact that they are not within the scope of the sanitary part of the Act cannot exclude them. (See Sykes v. Sowerby, p. 372, col. 2, R.I.B.A. JOURNAL, 8th June 1901, addendum. Clean-water private sewers were excluded as being within the express exception of "own profit," and were held "own profit "because both private and clean, and not because within an implied exception of clean sewers from the sanitary part of the Act. There being no "own profit" clause excepting gutters and clean drains from the sanitary provisions of P.H.A., Part III., these are under section 25.) On the other hand, if it is not a quibble, one might ask how, except in Japan, gutters could be constructed till the house was built. The section forbids you to build till you have constructed drains (and therefore gutters)!

A sewer cannot be enforced under this section. (Clarke v. Paddington, 5 Jur. [N.S.] pt. 1. 358. R. v. Tynemouth, 1896, 2 Q.B. 451; Lumley, 63,

1902 edition.)

70. Number. - More than one drain may be prescribed, if it is necessary for the effectual drainage of the particular house (Matthews v. Strachan, L. R. 1901, 2 K.B., at p. 547, middle, and pars. 54, 66, 75). The authority can prescribe a minimum, but not a maximum, and therefore the drain-owner can add others if so minded.

71. Size, not Shape. - The next point as to which orders may be given is size; and in view of the conflicting advantages of small and large pipes, there will be great variety of opinions among Councils. No special shape can be required, provided the sectional area is equivalent to that of a round pipe of the prescribed size.

72. Materials.—Materials may likewise be regulated, and here the exponents of high vitrification with its distortions, and low vitrification with its porosities, and on the other hand the apostles of metal, will each fight for their own fancy, as in Austin v. St. Mary, Lambeth (see par. 60).

But, though our district stood alone among all the urban councils of England in fancying one particular kind of pipe, we could not refuse to lay it, if so ordered. The authority could not specify the maker or even the locality, unless indeed one or the other had the sole monopoly of such class of pipe, and provided also such council was acting bona fide (pars. 54 and 55). For this law as to materials see Austin v. St. Mary, Lambeth (par. 60).

A covered drain may be of brickwork if the

authority so order it.

73. Level and Fall,-The last two points I take together. The authority cannot, as we saw in considering relevant discretion (par. 54), attempt by orders as to drains to raise the site of our house or to force us to put our sewage founts (bath-rooms, sinks, w.c.'s, &c.) into upper rooms (Cary, 11 L. T., 339), for this would be to exercise an irrelevant discretion. The Act says, given the house ("such house"), the Council can prescribe the drains. This would be to prescribe the house. (See also the cases in "Relevant Discretion" (par. 54), especially Ward's and Cary's, and Max. 48.)

The matter becomes certain when we use that test which is quite as useful as decided casesviz. comparison with earlier Acts in pari materia (i.e. passed with the same object) (Max.). Now the Metropolis Management Act of 1855, section 75 (end), which otherwise has the same general objects as our section, gives express power to raise the house-level, for it says, "and whenever any house . . . is rebuilt as aforesaid the level of the lowest floor . . . shall be raised sufficiently to allow the construction of such a drain." &c.

Again, in the interesting debates on the P.H.A. (see Lord Morpeth's speech, Hansard, xcvi. 391) it was mooted whether this power should not be

given in the latter Act.

In accordance with the legal principles of interpretation (see note j, 1), and from the above speech, we are forced to conclude that it had occurred to the mind of the Legislature, and since it was omitted it was omitted on purpose, and was not intended to be exercised. (Max. 38d, 55, 220, 222b, 232a, 326c, 352b, 456, 459, 475, 477, bottom; contra, 436d, 438a, 509b. If impliable or unnecessary words are omitted, this does not show intention to exclude (Max. 457c); but, as I shall show, such power is not implied.)

The requirement that the drains shall empty into a sewer within 100 feet (if there is one) implies this power, for the sewer must, as we shall see (par. 82), be an available sewer. Nor can the Council exercise it in prescribing the alternative destination (cesspool, &c.), for they must prescribe it reasonably and relevantly, as we shall find when

considering "Cesspools."

The authority, then, cannot raise the level of the house, either of its basement or of the place where the drains would naturally emerge from under the house.

Nor can it raise the level of the sewage founts (bathrooms, sinks, &c.); for a power to raise the sewage fount in the metropolis was, of course,

impliedly included in the above section 75, and, being omitted here, is likewise excluded in districts outside the metropolis.

Still, where are we to stop? Could we (and, as will be seen when destination is discussed, we might have reasons for so doing) excavate the earth to an inordinate depth and put our sewage fount at the bottom of the pit thus made? I think not; for if by our own act we made a sewer or other prescribed destination unavailable or absurd, then we could not plead that it was so. We should have to make it again "available" and reasonable by modifying our house.

Notes (l, m, n, o) as to Council's Orders on Surveyor's Report (pars. 41 to 65).

Surveyor's entry to inspect and connect (par. 49). If the surveyor did not first obtain this order, he could be refused admission, for he is not given any power to enter under section 25, since he could not plead that he was bound to report (though we could not build so long as we delayed him), nor is he entitled without an order to enter to collect evidence against us when we have built, for on this analogy no home would be sacred against the policeman. Section 306 does not apply to this case, for, as we see, the surveyor has no right to enter, and the punishment there enacted for obstructing officials relates only to obstruction of persons entering to carry out some practical work (see Wheatcroft v. Matlock, 52 L. T. [N.S.], 356, 60 J. P. 490, 6 W. R. 432; and Lamacraft v. St. Thomas, 42 L. T. [N.S.] 365). (The surveyor could not enter under sections 41, 102 or 119, which relate only to nuisances, smoke, and bad victuals.) He might perhaps enter under colour of section 102 (Nuisances).

As to the magistrate's power to refuse the order, compare Robinson v. Sunderland on s. 305 (q.v.) with Vines v. North L. C. S. 63 J.P. 244, on s. 102. As to connecting, we could not refuse to connect the drain with the sewer, and the local authority could enter forcibly to do this (Searle v. Bennett, Times, December 1, 1877).

(m) Need reasons be given? (par. 56). The answer is in the negative (see Nicholl v. Epping, 1899, 1 Ch. 844, where no reason was given, and yet the order as to privy was valid), and this is so even though a reason is asked (R. v. Sykes, 1 Q.B.D. 52; Ex p. Smith, 3 Q.B.D.

In those cases the discretion was a judicial one, here it is either administrative or legislative—i.e. to act or enact. So here, a fortiori, no reasons need be given. Who, e.g., so here, a jornor, no reasons need be given. Who, e.g., ever heard of Councils which decided to build a bridge, or trustees who exercised a discretionary power of sale (Lewin, 488), or freemen who voted for aldermen (R. v. Mayor and A. of London, 3 B. and Ad. 255), or local authorities who made by-laws (Comyns' Digest, "By-law"), being obliged to give reasons to the public? (Masters v.

Pontypool, 9 Ch. 684, is not contra).

Subsequent (even late) ratification by Council

validates (par. 60). In Austin v. St. Mary, Lambeth (27 Ch. 388) the Board were, under the Metropolis Management Act, 1855, section 76, given seven days after receiving notice from the building owner, in which to make orders as to drains. Act gave the surveyor no power to do so. In October the surveyor refused to sanction Aylesbury pipes. On the 5th of November notice was given by the building owner to the Board, the surveyor still remaining of the same opinion. Five weeks later, in December, i.e. a month after the statutory limit, the Board gave notice to the plaintiff to put in "the best stoneware pipes, materials to be to the satisfaction of the surveyor" (observe they said nothing about Aylesbury pipes). The plaintiff put in the Aylesbury make, and the Board thereupon gave notice that they would pull them up. The Court gave judgment for the Board. In the argument the lateness of the order was not

pleaded.

This case looks curious at first sight, for it appears as if the December order was out of time, and did not forbid Aylesbury pipes. It seems to me that, if the surveyor' order was the order, then these two matters are explained; and further, the case shows that subsequent ratification of an order made without authority by a surveyor will make it valid, even though the ratification comes later than the due date for an order by the Council. If the December order is the order, then it is hard to explain why its lateness was not pleaded. But I think the ratification must not be unconscionably late.

(a) Reasonable time.
Orders must be given in reasonable time (par. 63) The cases of the Hattersley v. Burr class, in which by-laws were voided because they expressly required a long delay, though in other respects distinguishable from cases where it is attempted to cure a statute by construing it, rather than to kill a by-law by voiding it, nevertheless show that the Courts do not approve of unconscionable delay. Now the Courts will construe a statute so as to make it reasonable, if they can do so without overstraining the language. But I think I can adduce cases more to the point, in which where documents or statutes are vague as to the time within which an act shall be done, the Courts insert the little phrase " within reasonable time.'

In cases as to delay in prescribing building lines (e.g. Newhaven L.B. v. N.S.B., 30 Ch. D. 370), we are told that the builder need not wait; but our case is not so strong, for there prescription is only a possibility; here orders as to drains are at least expected by the Legislature.

In Bradley v. Greenwich B.W. (3 O.B.D. 388) we are told by Cockburn, C.J., that if the Board do not apportion sewering expenses within a reasonable time, they can be compelled by mandamus to do so, though the Act laid down no time limit. The other proposition as to limitations laid down in that case will, if considered, be seen to he irrelevant.

So, again, the compelling of better sewers for private streets must be done as soon as the sewers vest, or the authority will be presumed to have been satisfied, for, as the Court said, a statute is construed so as not to be unduly unreasonable (1887, Bonella v. Twickenham, 20

Ch. D. 66).

Dulwich (18 L. T. [O.S.] 183), Lord In R. v. Campbell, C.J., thought that powers given to the founder by the Crown incorporating a charity which authorised him to make rules could be exercised after seven years. Patterson, J., agreed, after some doubt. Coleridge, J., remarked that such rules must of necessity be later than the incorporation. This case does not rest on "standing by.

So, again, in private matters. In trusts for sale reasonable speed is implied (Lewin, 485)-(this does not rest on "standing by") and disclaimers of trusts must not be made unduly late. In contracts—as, e.g., sale or return of goods-return within reasonable time is presumed, and so in all contracts acceptance of an offer must be made within a

reasonable time.

Some, but not quite all, of these cases rest on the equitable doctrine of "lying by" or "standing by." If the authority by its delay encourages the builder to act upon the expectation that it has no intention of exercising the power to make orders, but is content to trust him to do what is right, and the builder has begun his work believing, as he has at least some right to believe, that he need not legally wait any longer, the matter comes under the rules as to "standing by" laid down by Lord Eldon in

Dann v. Snurrier (1802, 7 Ves. 231, 6 R.R. 119) (see also On the other hand, Judges are not impliedly forced to

give their judgments within a reasonable time (Max.)

I have come to the conclusion that, especially in the face of this legal authority, the cases of Rudland v. Sunderland, and R. (pros. Veitch) v. Newcastle, quoted in my

previous lecture, do not apply.

The case of Rudland v. Sunderland (52 L. T. 617) is not in point, for there not only was the requirement as to the period of waiting left vague in the by-law, but there was also a provision that no building should be begun until the whole road had been kerbed by other frontagers. As this might never have been done, it might have forbidden building altogether. It would then have been useless for the Court to have tried to make the one part of the by-laws reasonable and therefore valid by reading into it the words "within reasonable time" if the other remained bad, and would frustrate their beneficent revisal because it would delay the builder for ever. They therefore did not do so.

In R. v. Newcastle (1889, 53 J.P. 788, 60 L. T. IN.S.) 963, at p. 966), the Judge said that, but for section 69 of the Newcastle-on-Tyne I.A., 1870, which required the Corporation to approve or disapprove of the intended new building within twenty-eight days, the Corporation could have delayed the builder for an unconscionable time. It might, therefore, be argued that had the twenty-eight days' limit been left out, the Court would have said that, though unreasonable, the Act required him to wait for as unconscionable a time as the Corporation thought fit to delay him; and that since statutes must be obeyed whether they are reasonable or not, the builder must exercise the virtue of patience. The only answer to the judgment thus cited is to say it is an obiter dictum; the case was not decided on the grounds there mentioned. Indeed, the Times Law Reports (section 5, T.L.R., 467) does not report them at all.

think, therefore, that on general grounds of standing by, and also under the Hattersley v. Burr class of cases, and the rule that a statute be construed reasonably, the authority cannot unconscionably delay; and I point to the particular cases as to building lines, apportionment, and sewering cases and R. v. Dulwich, and the law quoted as regards private trusts and contracts, and the equitable doc-

trine of "standing by," as proving this.

If the order comes late, and the builder can, without spoiling his previous work or making previous expenditure useless, obey it, he must perhaps do so, unless the effect of combining his system already laid and the ordered system would be an absurdity. He might well be reasonable, though he takes care not to suffer from the delay of the Council. If, however, my contention that orders must be given within reasonable time can be supported apart from the doctrine of standing by, then the builder may refuse to consider the late orders at all.

(2) What is a reasonable time?—Some idea of what would

be an unreasonable time can be formed from Hall v. Nixon (L. R., 10 Q.B. per Lush, J., p. 160), where the Court said: "A by-law which might prevent a man from doing anything for two months, I should say was unreasonable." approval of buildings, which was there in question, would take a longer time than approval of drains, so perhaps even a less time would be allowed for orders as to the latter. Some allowance, however, must be made for the intervals between meetings of the Council or the Drain Committee.

The times in the statutes may help us by showing with what speed Councils can act. In one statute (the M.M.A., 1855, section 76), as we saw in Austin v. St. Mary, Lambeth, the time was seven days for giving orders as to drains. In the P.H.A. it is one month for the more serious matter of approval of plans. These times have no legal force in this case, but may help us to see what capable persons have considered a reasonable time.

